

WHAT IS CLAIMED IS:

1. A subgenomic replicon of dengue virus origin comprising a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME).
2. A subgenomic replicon of dengue virus origin comprising a deletion for the sequence coding for PreM and E structural proteins (Δ ME).
3. A subgenomic replicon of dengue virus origin comprising a deletion for the sequence coding for E structural protein (Δ E).
4. A subgenomic replicon of dengue virus type 1 origin comprising a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME).
5. A subgenomic replicon of dengue virus type 1 origin comprising a deletion for the sequence coding for PreM and E structural proteins (Δ ME).
6. A subgenomic replicon of dengue virus type 1 origin comprising a deletion for the sequence coding for E structural protein (Δ E).
7. A subgenomic replicon of dengue virus type 2 origin comprising a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME).
8. A subgenomic replicon of dengue virus type 2 origin comprising a deletion for the sequence coding for PreM and E structural proteins (Δ ME).
9. A subgenomic replicon of dengue virus type 2 origin comprising a deletion for the sequence coding for E structural protein (Δ E).
10. A subgenomic replicon of dengue virus type 3 origin comprising a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME).
11. A subgenomic replicon of dengue virus type 3 origin comprising a deletion for the sequence coding for PreM and E structural proteins (Δ ME).
12. A subgenomic replicon of dengue virus type 3 origin comprising a deletion for the sequence coding for E structural protein (Δ E).
13. A subgenomic replicon of dengue virus type 4 origin comprising a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME).
14. A subgenomic replicon of dengue virus type 4 origin comprising a deletion for the sequence coding for PreM and E structural proteins (Δ ME).

15. A subgenomic replicon of dengue virus type 4 origin comprising a deletion for the sequence coding for E structural protein (ΔE).

16. A subgenomic replicon of dengue virus origin comprising a deletion for the sequence coding for C, PreM, and E structural proteins (ΔCME), for PreM and E structural proteins (ΔME), or for E structural protein (ΔE); and further comprising part or all of the 5'UTR; at least about the first 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, or 175 nucleotides of C protein; at least about the last 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, or 175 nucleotides of E protein; substantially all of the nonstructural region; and part or all of the 3'UTR.

17. A subgenomic replicon of dengue virus origin comprising a deletion for the sequence coding for C, PreM, and E structural proteins (ΔCME), for PreM and E structural proteins (ΔME), or for E structural protein (ΔE), which is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities.

18. A vaccine comprising a subgenomic replicon of dengue virus origin which comprises a deletion for the sequence coding for C, PreM, and E structural proteins (ΔCME), for PreM and E structural proteins (ΔME), or for E structural protein (ΔE), optionally which

is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities, and a pharmaceutically acceptable carrier.

19. A therapeutic comprising a subgenomic replicon of dengue virus origin which comprises a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME), for PreM and E structural proteins (Δ ME), or for E structural protein (Δ E), optionally which is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities, and a pharmaceutically acceptable carrier.

20. A dengue virus like particle comprising a subgenomic replicon of dengue virus origin which comprises a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME), for PreM and E structural proteins (Δ ME), or for E structural protein (Δ E), optionally which is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities, and structural proteins of the homologous dengue virus wherein said structural proteins encapsulate said subgenomic replicon.

21. A method of immunization comprising administering to an individual in need thereof a subgenomic replicon of dengue virus origin which comprises a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME), for PreM and E structural proteins (Δ ME), or for E structural protein (Δ E), optionally which is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities.

22. A method of immunization comprising administering to an individual in need thereof a dengue virus like particle which comprises a subgenomic replicon of dengue virus origin comprising a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME), for PreM and E structural proteins (Δ ME), or for E structural protein (Δ E), optionally which is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities, and structural proteins of the homologous dengue virus wherein said structural proteins encapsulate said subgenomic replicon.

23. A method of treatment comprising administering to an individual in need thereof a subgenomic replicon of dengue virus origin which comprises a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME), for PreM and E structural proteins (Δ ME), or for E structural protein (Δ E), optionally which is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities.

24. A method of treatment comprising administering to an individual in need thereof a dengue virus like particle which comprises a subgenomic replicon of dengue virus origin comprising a deletion for the sequence coding for C, PreM, and E structural proteins (Δ CME), for PreM and E structural proteins (Δ ME), or for E structural protein (Δ E), optionally which is adapted to receive at least a nucleotide sequence without disrupting its replication capabilities, and structural proteins of the homologous dengue virus wherein said structural proteins encapsulate said subgenomic replicon.